

## 1.1 GENERAL EMPLOYEE RESPONSIBILITIES

The integrity of an official weight certificate is essential. Official personnel must avoid or eliminate situations that might affect or raise questions on the accuracy of a weight certificate.

### a. Supervisor Responsibilities

#### (1) General

Managers and supervisors<sup>1</sup> must ensure that official personnel<sup>2</sup> perform weighing procedures correctly.

#### (2) Specific

##### (a) Ensure official personnel:

- 1) Follow weighing instructions and procedures;
- 2) Follow proper security procedures for radios, seals, keys, and certificates;  
and
- 3) Complete documentation, such as weight and seal logs, neatly and correctly.

(b) Provide official personnel with applicable weighing equipment, instructions, handbooks, and other required materials.

(c) Ensure smooth and complete communication of pertinent information between shifts or work crews.

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<sup>1</sup>The term "manager" as used in this chapter means FGIS Field Office Manager (FOM) or equivalent supervisory position agency manager (AM) at an official agency. The term "supervisor" means FGIS shift supervisor or equivalent supervisory position at an official agency.

<sup>2</sup>Throughout the text, the term "weigher" will be interchangeable with "official personnel." The weigher's responsibilities may be different in automated weighing systems approved by FGIS.

- (d) Solve or direct to responsible personnel all weighing and personnel problems.
- (e) Provide technical weight training to personnel as necessary.
- (f) Ensure proper communication with elevator management of instructions, complaints, equipment failures, scale malfunctions, delivery system problems, safety hazards, or other pertinent information.
- (g) Maintain an up-to-date Facility Handbook.
- (h) Inform management of any grain handling or weighing systems changes. (§800.46 of the regulations under the United States Grain Standards Act (Act) requires an elevator to notify official agencies.)
- (i) Oversee the completion, issuance, and proper disposition of all official weight documents. (All unusual situations shall be documented on the weight loading log, scale tapes, or other applicable locations.)
- (j) Comply with safety requirements include documentation of safety hazards. Follow applicable instructions.

b. Weigher Responsibilities

(1) General

To perform weighing procedures properly, the weigher must:

- (a) Ensure conditions necessary for proper scale(s) operation prior to each shift (see Section 1.4) and operate or supervise operation of scale(s) according to instructions.
- (b) Thoroughly document weighing process and be responsible for the issuance of legible, accurate certificates.
  - 1) Maintain and implement current procedures, instructions/directives, and notices for weighing services; possess working knowledge of scales operated or supervised and of grain handling system including diversion points; and recognize and document scale malfunctions.
  - 2) Ensure security of keys, radios, locks, seals, certificates, scale tapes, tickets, and other records.
  - 3) Provide on-the-job training for assigned personnel.

- 4) Communicate, if directed, to elevator personnel/management any instructions, complaints, equipment failures, scale malfunctions, safety hazards, or other pertinent information.
- 5) Perform all other weighing duties as directed by supervisor to ensure accurate certification of weights.

(2) Specific

Unless automated methods are in place, the weigher monitors weighing activities of elevator personnel and verifies control board settings, digital weight displays, and printer operation and output. Control board or monitor settings must be physically verified a minimum of once per shift and results documented on export weight loading log. Comparison of the visually checked digital weight indicator to the printout assures proper system operation. Managers determine frequency of printer/visual checks which must be documented on scale tapes. Specifically, the weigher must:

- (a) Recognize actual or potential problems with elements in the weighing and/or printing system affecting the accuracy of weights. Noted scale and printer malfunctions must be documented following Chapter 2 of the Weighing Handbook.
- (b) Verify seals on the limited access areas of scales used for official weighing or supervision of weighing and document checks on Scale Record Log and Seal Record Log.
- (c) Observe control board or monitor to ensure grain flow security by verifying that the lights, switches and control board monitors are operating properly and the controlled gates, slides, and valves are in correct alignment. Assistance from the elevator weighman to activate the display switch may be required. Security checks made on the handling and weighing system are documented on the Weight Loading Log.
- (d) Ensure scale operation according to Section 1.4:

- 1) Verify digital weight indicator to printed weight through monitoring the weighing of drafts, and inspecting weigh hoppers, lever systems, and load cells for conditions impairing normal scale operations.
  - 2) Record accurate and legible scale tickets or tapes.
  - 3) Inspect scale and garner hopper gates for leaks at least once per shift.
  - 4) Managers determine the frequency of checks between the digital weight indicator and printed weight. Checks must be denoted on the scale tapes.
- (3) Conduct surveys of weighing system:
- (a) Verify elevator's scale and delivery system are clear of grain.
  - (b) Ensure necessary conditions for proper performance of equipment.
  - (c) Secure spouts, trippers, distributors, and other diversion points with seals, locks, or electrical lockouts to ensure grain flow security.
  - (d) Check and record numbers and location of seals and locks on Seal Log.
  - (e) Check cleanout of shipping bins.
- (4) Obtain carrier identification and, if possible, examine conditions of carrier that would affect quantity of grain shipped or received. For inbound grain, carrier must be checked according to Section 1.2 for cleanout after weighing operation. For shiplot grain, stowage of grain on carrier must be documented.
- (5) Monitor all diversion points to maintain grain flow security including belts, conveyors, boot pits, elevator legs, shipping bins and other diversion points, and marine legs, clam shells, loading spouts or other loading/unloading apparatus.
- (6) Monitor weighbacks, rejected and returned (R&R) shipping bins, and offloading or discharging of grain from carrier.
- (7) Thoroughly document all official weighing operations.

## 1.2 INBOUND MOVEMENT

Inbound grain movements are weighed at the applicant's request. Inbound intercompany barge movements at export elevators must be weighed officially under the Act. Incidents of suspected attempts to avoid these mandatory requirements must be reported as directed in Chapter 2, "Weighing Grain Without Official Supervision."

Weigher's duties are to monitor the efficient transfer of all approved railroad track, vehicle platform or hopper scales; monitor grain weighed in hopper scales; use seals, locks, control board lockouts or other approved means, including FGIS approved automated weighing systems, for Class X weighing; and document spills as instructed in Sections 2.3 and 2.4 of this handbook.

### a. General Unloading Operation Guidelines

#### (1) Pre-unloading Responsibilities

FGIS personnel must supervise pre-unloading operations from barge, rail, or truck movements. Specifically, they must:

- (a) Record on the weight certificate carrier identification and any factual conditions pertinent to the carrier's ability to transport grain, and if possible, identify type of grain. In the absence of official inspection, use of verified elevator manifests is acceptable. Managers establish verification procedures which may include checking conveyor belts, checking D/T samplers, performing random pre-unloading checks, observing closed-circuit television monitors, or communicating with co-workers in the carrier's vicinity.
- (b) Record railcar seal disposition at the applicant's verbal or written request noting the date, requester's name and carrier(s). The verified disposition of each of the lower seals, (i.e., intact, broken, not present or not properly applied), must be recorded in the "Remarks" section of the weight certificate as follows:

1) Individual cars:

"Seals on B-1 and B-2 intact, seal not present or broken on B-3."

2) For unit trains:

"The following carrier compartment seals were broken or not present (e.g. NAHX 40963-B-1 and B-2); all other carrier compartments were properly sealed."

3) Safety reminder:

CRAWLING UNDER HOPPER CARS TO VERIFY SEAL CONDITIONS IS PROHIBITED!

- (c) Survey the elevator's scale and delivery system each shift prior to the start of weighing or if a spill is suspected. Document any conditions that might affect performance of the scale or other grain handling equipment.

(2) Unloading Responsibilities

During the unloading operation the weigher must:

- (a) Follow procedures in Section 1.4 for operating and monitoring scales.
- (b) Document inbound carrier supervision with scale tapes or tickets.
- (c) Maintain grain flow security by ensuring delivery to the scale with minimal waste.

(3) Post-unloading Responsibilities

Upon completion of unloading, official personnel must:

- (a) Ensure removal of all possible grain from carrier and from delivery system. Excluding barges, if possible estimate the grain remaining in the carrier which could reasonably be removed and/or grain that was spilled.
- (b) Verify cleanout by visual, mechanical or electronic methods with frequency determined by type of carrier. Barges require continual supervision. Rail and truck carriers require periodic checks, with frequency and documentation procedures determined by the manager as necessary to maintain acceptable results.

- (c) Follow certification procedures in Chapter 2.

(4) Scale Testing Responsibilities

Where house grain cannot be used to conduct a build-up on a hopper scale test, the weigher must:

- (a) Use inbound carrier's grain to conduct a build-up test on a hopper scale. If the test shows the scale out-of-tolerance or needing adjustment, the scale official determines the correct weight.
- (b) Issue an unqualified certificate and write explanation on scale tape or ticket.

b. Specific Operations Guidelines

(1) Inbound Trucks Weighed on Platform Scales

- (a) Establish a consistent policy of either weighing drivers/riders on or off scales.
- (b) Obtain tare weight: Weigh empty vehicle exactly as full vehicle was weighed for gross weight, (i.e., same riders or accessories.)
- (c) Do not use pre-determined tare weights for empty vehicles.

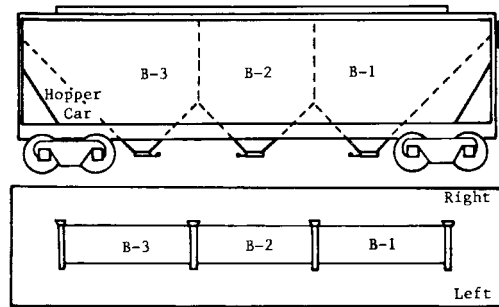
(2) Local Movements

- (a) Officially weigh movements of grain within the elevator upon request of elevator management.
- (b) Follow all procedures in Chapters 1, 2, and 3, of Weighing Handbook for operation of scales, monitoring grain flow, documenting facts and certifying results.

(3) Documentation Terminology

When documenting carrier condition or grain location on inbound carriers, use the following terms:

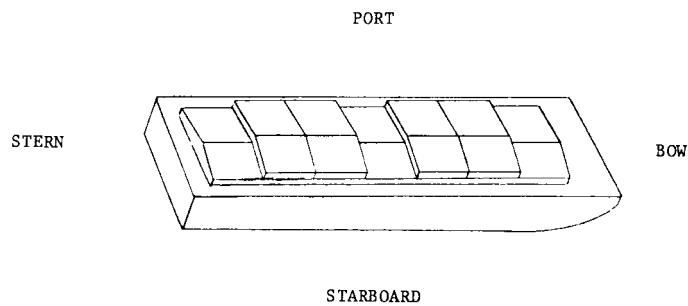
## HOPPER CAR DIAGRAM



### (a) Hopper Cars

Identify brake end as "B" end; label hopper nearest brake end "B-1" and remaining hoppers toward opposite end in sequence (e.g. "B-2" and "B-3".)

## BARGE DIAGRAM



### (b) Barges

Term forward end of the barge "bow" and after end the "stern." When facing the bow end, the left side is "port" and right side is "starboard."



### 1.3 OUTBOUND MOVEMENT

Export shipments require official weighing; other movements are weighed at the applicant's request. Exempted export shipments are identified in FGIS Program Directive 902.1 with the procedures for requesting waivers to weighing requirements.

Outbound grain movements must be efficiently delivered to the carrier without avoidable waste or loss. Monitor grain flow from scale to carrier, and for Class X weighing, secure system by use of seals, locks, control board lockouts, or other approved means. Correct for spills and certify according to instructions in Chapter 2 of the Weighing Handbook.

#### a. General Loading Operation Guidelines

##### (1) Pre-loading Responsibilities

- (a) Secure elevator's scale and delivery system and clear it of all grain prior to weighing operations. Examine seals, locks, and/or gate indicators to verify their working condition. Complete preweighing checks listed in Section 1.4.
- (b) Perform a required stowage examination on land and export waterborne carriers, and at the applicant's request, on domestic waterborne carriers. Follow official inspection stowage examination procedures exactly.

##### (2) Loading Responsibilities

- (a) Follow scale operation procedures in Section 1.4 for weighing grain to the carrier.
- (b) Maintain grain flow security with methods specified in Section 1.5.
- (c) Prevent addition to or removal of material through cleaning, drying, or other processing of the grain en route to the carrier unless allowed by regulation or applicable instructions.

##### (3) Post-loading Responsibilities

- (a) Examine the grain handling system by visual or electronic methods for the correct distribution of weighed grain.

- (b) Document spillage or lost grain as instructed in Chapter 2.
- (c) Conduct a survey of the grain handling system at the completion of each export lot.
- (d) Document loading of outbound carriers with scale tapes or tickets and, of ships with a Weight Loading Log, scale tapes or tickets, or FGIS approved methods.

b. Vessel Loading Requirements

(1) Sublot Determination and/or Verification

Determine the exact weight of each sublot or verify the accuracy of the weight as determined by elevator personnel and record on the Weight Loading Log.

- (a) When there is direct correlation with the inspection sample (i.e., there are no surge or shipping bins between scales and mechanical samplers), follow these procedures:
  - 1) Confer with elevator management to determine sublot size.
  - 2) Keep a running total of drafts to determine the end of the sublot.
  - 3) Inform both inspection and elevator personnel when a sublot completes.
  - 4) Document the Weight Loading Log.
- (b) When there is no correlation with the inspection sample (i.e., grain is held in surge or shipping bins after the scales but before the mechanical samplers), follow these procedures:
  - 1) Establish a system to accurately determine the designated sublot size.
  - 2) Make sublot determination except when practicality shows elevator personnel can best do this.
  - 3) Develop and implement a procedure to verify the accuracy of the sublot determination system.

(2) Shipping Bin Examinations

- (a) When the grain quality inspection takes place prior to grain being loaded aboard the carrier, examine each shipping bin for cleanout as it empties. Visual or electronic examination is acceptable.
  - 1) Post the time when shipping bins are checked at the beginning and end of each lot or cutoff for a visual or electronic examination.
  - 2) Verify accuracy of an electronic indicator and document according to procedures established by the manager and explained in the Facility Handbook.
- (b) Deliver to the carrier or weigh back and account for by correction any grain remaining in a shipping bin after the lot is completed.
- (c) At facilities where bins do not continually self-clean, and the remaining material does not meet the definition for grain or is substantially below load order quality:
  - 1) Do not allow this material to be loaded.
  - 2) Get bin design corrected or develop a procedure to estimate grain in this material and replace or deduct the amount from the certified weight.
  - 3) Do not allow the return of contaminated grain to sound grain bins.
- (3) Shipping Bin Reject & Returns
  - (a) Subtract from the total weight the amount of grain rejected and returned to the house because of grade, and record this on the Weight Loading Log.
  - (b) Draw a red line through the returned amount and show "R&R" on the log.
  - (c) Adjust and document scale tapes and tickets as "R&R".
- (4) Discharging Grain from an Outbound Carrier.
  - (a) Determine grain amount to be removed.

- (b) Ensure grain flow system is secure and clear.
  - (c) Monitor grain flow.
  - (d) Weigh grain and deduct the weighed amount from the net weight.
  - (e) Document all discharges and, at the applicant's request, issue a weight certificate for discharged amount (see Chapter 2).
- (5) Weight Cutoff During Loading Operation
- (a) At the applicant's request, stop weighing, deliver grain to the carrier, and certify the amount delivered.
  - (b) Include only the amount of grain on the carrier; do not include grain weighed but not delivered, e.g., grain in shipping bins.
  - (c) Re-weigh the bins and subtract the amount from the total if the amount of grain in the shipping bins at the time of cutoff is unknown.
- (6) Sealing Shipping Bins

Whenever official personnel leave the elevator, they must secure shipping bins containing weighed grain by using seals, locks, or electronic security methods.<sup>4</sup> If, upon returning to the elevator, they believe the grain security voided and the quantity changed, they must return the grain to the house and follow these procedures:

- (a) When the exact amount of grain in the shipping bin is known, subtract that weight amount from the net weight loaded on the vessel.
- (b) When the amount of grain in the shipping bin is unknown, subtract the total capacity from the net weight loaded on the vessel.
- (c) Document the Weight Loading Log

The use of locks on the bottom of shipping bins prevents the grain security from being voided.

c. Barge and Container Guidelines

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<sup>4</sup>These sealing provisions provide for sealing grain flow to maintain quantity. The sealing of access openings to control the addition of sweepings or other grain is at the manager's discretion.

(1) Seal Requirements for Outbound to Export Carriers

- (a) If shippers request an export certificate identifying the ocean carrier at the time of loading, i.e., containers, lash barges, etc.:
  - 1) Seal the inland carrier.
  - 2) Record seal numbers on the weight certificate.
  - 3) Use identification of inland container.
  - 4) Mark certificate "out" movement.
- (b) On loading the domestic carrier aboard the vessel, the local office will:
  - 1) Obtain all certificates--original and copies.
  - 2) Check seals.
  - 3) Re-weigh the carrier if seals are not intact.
  - 4) Checkload the carrier aboard ocean-going vessel.
  - 5) Issue export certificate with identification of ocean-going vessel and net weight of the carrier loaded, or for a combined-lot certificate, the combined net weight with the other carriers loaded.
- (c) When the shipper does not request the identification of an ocean carrier on the export certificate, seals are unnecessary.

(2) Seal Requirements for Outbound to Domestic Carriers

When the shipper applies seals and requests they be shown on the weight certificate:

- (a) Verify seal numbers.
- (b) Record seal numbers on weight certificate.

- (3) Documentation for Outbound Barges
  - (a) Scale tapes or tickets are required.
  - (b) Managers may require additional documentation.
- d. Outbound Railcar Guidelines
  - (1) Loading Single Railcars, Unit Trains and Combined Lots.
    - (a) Weigh individually, collectively as a unit train, or batch-weigh as a combined lot.
    - (b) Certify following procedures in Chapter 2.
  - (2) Recording Seals at Applicant's Request.
    - (a) Verify proper application of seals using procedures in 1.2.
    - (b) List seal numbers in "Remarks" section of weight certificate.
  - (3) Documentation Requirements
    - (a) Use scale tapes or tickets.
    - (b) Obtain list of railcar identification numbers for certification for unit trains and combined lots.
- e. Procedures for Outbound Trucks Weighed on Platform Scales
  - (1) Establish consistent policy of either weighing drivers/riders on or off scales.
  - (2) Obtain gross weight: weigh full vehicle exactly as empty vehicle was weighed for tare weight (i.e., same riders or accessories).